UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/682,095	07/19/2001	Oscar Mora	38146	7389

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29569	7590	12/03/2003	GOLD, AVI M

JEFFREY FURR
253 N. MAIN STREET
JOHNSTOWN, OH 43031

ART UNIT	PAPER NUMBER
2157	

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/682,095	MORA, OSCAR
	Examiner	Art Unit
	Avi Gold	2157

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

     If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All b)☐ Some * c)☐ None of:

         1.☐ Certified copies of the priority documents have been received.

         2.☐ Certified copies of the priority documents have been received in Application No. _____ .

         3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

     a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)   4)☐ Interview Summary (PTO-413) Paper No(s). _____ .

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)   5)☐ Notice of Informal Patent Application (PTO-152)

3)☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .   6)☐ Other: .

DETAILED ACTION

This action is responsive to the application filed July 19, 2001. Claims 1-17 are

pending. Claims 1-17 represent data transmission over a reliable transport layer

protocol in a low processing power 8-bit microcontroller.

Claim Objections

1.   Claim 10 is objected to because of the following informalities: In the last line the

word "an" is used twice in a row. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

3.   Claims 4, 5, 6, 9, 13, 14, and 15 are rejected under 35 U.S.C. 112, second

paragraph, as being indefinite for failing to particularly point out and distinctly claim the

subject matter which applicant regards as the invention.

4.   The claims are generally narrative and indefinite, failing to conform with current

U.S. practice. They appear to be a literal translation into English from a foreign

document and are replete with grammatical and idiomatic errors.

5.   Claims 4 and 13 recites the limitation "said type of data field" in line 1. There is

insufficient antecedent basis for this limitation in the claim.

6.   Regarding claims 6 and 15, the word "means" is preceded by the word(s) "timer"

in an attempt to use a "means" clause to recite a claim element as a means for

performing a specified function. However, since no function is specified by the word(s)

preceding "means," it is impossible to determine the equivalents of the element, as

required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd.

App. 1967).

Claim Rejections - 35 USC § 102

7.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by
> another filed in the United States before the invention by the applicant for patent or (2) a patent
> granted on an application for patent by another filed in the United States before the invention by the
> applicant for patent, except that an international application filed under the treaty defined in section
> 351(a) shall have the effects for purposes of this subsection of an application filed in the United States
> only if the international application designated the United States and was published under Article 21(2)
> of such treaty in the English language.

8.   Claims 1, 4-7, 10, and 13-16 are rejected under 35 U.S.C. 102(e) as being

anticipated by Olkin, U.S. Patent No. 6,310,892.

Olkin teaches the invention as claimed including a field of protocols for a reliable

connectionless protocol (see abstract).

Regarding claim 1, a method for providing a reliable connectionless protocol to

transfer short pieces of information, the method comprising the steps of:

Using a data transfer process using a layers stack model consisting of multiple layers

(see fig. 2; col. 1, lines 59-67, col. 2, lines 1-12, Olkin discloses a data transfer process

using layers); and

Adding an intermediate transport layer with the following fields, type of packet and packet ID (col. 1, lines 59-67, col. 2, lines 1-12, Olkin discloses the use of an intermediate transport layer; col. 5, lines 20-33, Olkin discloses a data field and source identification field for packets).

Regarding claim 4, the method in claim 1 in which said type of data field has three possible meanings:

that it is a packet that contains data that must be acknowledged (fig. 1, col. 1, lines 15-46, Olkin discloses data that is sent during a three way handshake that needs to be acknowledged);

that it is a packet that contains data that does not need to be acknowledged (col. 3, lines 28-48, Olkin discloses packets that do not need acknowledgement); and

that it is a packet that is an acknowledge response (fig. 1, col. 1, lines 15-46, Olkin discloses a segment of the three way handshake that is an acknowledgement).

Regarding claim 5, the method in claim 1 in which said Packet ID has three possible meanings:

it is a number chosen by the packet sending means if it is in a packet that contains data that must be acknowledged (fig. 1, col. 1, lines 15-46; fig. 4, col. 4, lines 9-22, Olkin disloses packets containing control information);

the field is ignored if it is in a packet that contains data that does not need to be acknowledged (col. 3, lines 28-48; fig. 4, col. 4, lines 9-22) ; and

it is the packet ID of the data packet being acknowledged if it is in a packet that is an acknowledge response (fig. 1, col. 1, lines 15-46; fig. 4, col. 4, lines 9-22).

Regarding claim 6, the method in claim 1 in which includes the following steps

comprising:

Sending a packet with the acknowledgement request (fig. 1, col. 1, lines 15-46, Olkin

discloses a packet that requests an acknowledgment during a three way handshake);

Turning on a timer means (col. 3, lines 3-5, Olkin discloses a time-out mechanism);

Waiting for an acknowledgement for the sent packet (col. 6, lines 50-56, Olkin discloses

a wait for packet acknowledgment);

Resending the packet if timer means exceed set response time without receiving an

acknowledgement (col. 6, lines 50-60, Olkin discloses the retransmission of a packet

after a certain amount of time);

Repeating the previous two steps until acknowledgement is received or a set number of

retries is reached (col. 3, lines 5-13, Olkin discloses the retransmission of a packet until

it is received or an amount of retries has been reached); and

Reporting the results (col. 3, lines 28- 47, Olkin discloses the viewing of data).

Regarding claim 7, the method in claim 1 in which includes the following steps

comprising:

Receiving a packet with an acknowledgement request (fig. 1, col. 1, lines 15-46);

Checking to see if it is a duplicate packet by comparing the packet number with the

previously received packet (col. 3, lines 1-5, Olkin discloses the check of duplicate

messages);

Generating an acknowledgement; and

Processing the data (col. 6, lines 50-60, Olkin discloses an acknowledgement of

received data and processing of it).

Claims 10 and 13-16 do not teach or define any new limitations above claims 1

and 4-7 and therefore are rejected for similar reasons.

Claim Rejections - 35 USC § 103

9.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

10.   Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Olkin further in view Engelke et al., U.S. Patent No. 6,504,910.

Olkin teaches the invention substantially as claimed including a field of protocols

for a reliable connectionless protocol (see abstract).

As to claims 2 and 3, Olkin teaches the method of claim 1.

Olkin fails to teach the limitation further including the use of a single byte for type

of packet field and packet ID.

However, Engelke teaches a voice and text transmission system (see abstract).

Engelke teaches the use of a single byte indicating the type or format of data packet

(col. 7, lines 47-57).

It would have been obvious to one of ordinary skill in the art at the time of the

invention to modify Olkin in view of Engelke to use a single byte for type of packet field

and packet ID. One would be motivated to do so because it would take up less bandwidth, which would allow packets to be transferred faster.

Claims 11 and 12 do not teach or define any new limitations above claim 2 and 3 and therefore are rejected for similar reasons.

11.   Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Olkin in view of Koenck et al., U.S. Patent No. 6,014,705.

Olkin teaches the invention substantially as claimed including a field of protocols for a reliable connectionless protocol (see abstract).

As to claim 8, Olkin teaches the method of claim 1.

Olkin fails to teach the limitation further including the use of processing with an 8-bit microprocessor.

However, Koenck teaches a portable data processing terminal for use in a radio frequency communications network (see abstract). Koenck teaches the use of an 8-bit microprocessor (col. 18, lines 51-59).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Olkin in view of Koenck to use an 8-bit microprocessor for processing. One would be motivated to do so because the use of an 8-bit microprocessor consumes a low amount of power compared to other microprocessors.

12.   Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Olkin in view of Renouard et al., U.S. Patent No. 6,161,123.

Olkin teaches the invention substantially as claimed including a field of protocols for a reliable connectionless protocol (see abstract).

As to claim 9, Olkin teaches the method of claim 1.

Olkin fails to teach the limitation further including the use of an UDP transport protocol.

However, Renouard teaches reliable communication over an unreliable transport layer in a hand-held device using a persistent session (see abstract). Renouard teaches the use of an UDP transport protocol (col. 4, lines 25-29).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Olkin in view of Renouard to use an UDP transport protocol to provide a reliable connectionless protocol. One would be motivated to do so because the use of an UDP transport protocol does not require a connection, memory requirements are reduced, and it requires less processing power.

Claim 17 does not teach or define any new limitations above claim 9 and therefore is rejected for similar reasons.

Conclusion

13.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pat. No. 6,543,005 to Bamford.

U.S. Pat. No. 6,621,799 to Kemp et al.

U.S. Pat. No. 6,076,114 to Wesley.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Avi Gold whose telephone number is 703-305-8762. The examiner can normally be reached on M-F 8:00-5:30 (1st Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 703-308-7562. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.

Avi Gold

Patent Examiner

Art Unit 2157

AMG

ARIO ETIENNE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100